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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/517,969	08/10/2005 Ruediger Kreuter		02968.268USWO	3601	
27805 THOMPSON H	7590 04/28/2008 HINE L.L.P.	3	EXAMINER		
Intellectual Pro	perty Group	HIGGINS, GERARD T			
P.O. BOX 8801 DAYTON, OH			ART UNIT	PAPER NUMBER	
			1794		
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			04/28/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applica	tion No.	Applicant(s)  KREUTER, RUEDIGER			
		10/517,	969				
		Examin	er	Art Unit			
		GERAR	D T. HIGGINS	1794			
<i>The</i> Period for Rep	MAILING DATE of this commun oly	nication appears on t	he cover sheet with the	correspondence ac	ddress		
WHICHEVI - Extensions o after SIX (6) - If NO period - Failure to rep Any reply rec	ENED STATUTORY PERIOD F ER IS LONGER, FROM THE N f time may be available under the provision MONTHS from the mailing date of this com for reply is specified above, the maximum soly within the set or extended period for replacived by the Office later than three months at term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF sof 37 CFR 1.136(a). In no munication. tatutory period will apply and y will, by statute, cause the a	FHIS COMMUNICATION Event, however, may a reply be will expire SIX (6) MONTHS from pplication to become ABANDON	ON. timely filed m the mailing date of this o NED (35 U.S.C. § 133).	•		
Status							
2a)⊠ This 3)⊡ Since	consive to communication(s) file action is <b>FINAL</b> .  The this application is in condition accordance with the practical in the practi	2b)∏ This action is for allowance exce	non-final. ot for formal matters, p		e merits is		
Disposition of	Claims						
4a) O 5)	n(s) 12-33 is/are pending in the first the above claim(s) 31-33 is/are first allowed. n(s) 12-30 is/are rejected. n(s) is/are objected to. n(s) are subject to restrict apers pecification is objected to by the	re withdrawn from c					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under	35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2) 🔲 Notice of Dr	eferences Cited (PTO-892) aftsperson's Patent Drawing Review ( Disclosure Statement(s) (PTO/SB/08) /Mail Date		4) Interview Summa Paper No(s)/Mail 5) Notice of Informal 6) Other:				

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## **DETAILED ACTION**

# Response to Amendment

1. The amendment filed 01/30/2008 has been entered. Currently claims 1-11 are cancelled, claims 12-22 are amended, and claims 23-33 are new.

2. The substitute specification filed 01/30/2008 has been entered.

### Election/Restrictions

3. Newly submitted claims 31-33 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the process of claims 31-33 is a distinct invention from the product of claims 12-30 given that the product can be made by another materially different process. Specifically, the protective layer can be placed on the substrate either by using adhesive or curing the protective resin on the substrate, and does not necessarily need to be formed out of the gas or plasma phase.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 31-33 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

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# Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 12-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation "identity document substrate" in claim 12 does not find support in the specification as filed. Applicant has removed reference to specific substrates and included the broad term "identity document substrate." It is unclear what substrates applicant is referring to; additionally, those additional unnamed substrates would not find support in the specification as filed.

The negative limitation "wherein the protective coating is not secured to the identity document by adhesive" does not find support in the specification as filed. At page 5, lines 5-10 of the clean copy of applicants' substitute specification there is disclosed the manner in which the protective coatings may be applied to the substrate. It includes gas or plasma phase deposition, spraying, dipping, and printing methods; however, it does not exclude using an adhesive with any of these methods.

The cited phraseology clearly signifies a "negative" or "exclusionary" limitation for which the applicants have <u>no</u> support in the original disclosure. Negative limitations in a claim which do not appear in the specification as filed introduce new concepts and violate the description requirement of 35 USC 112, first paragraph, *Ex Parte Grasselli*, *Suresh*, *and Miller*, 231 USPQ 393, 394 (Bd. Pat. App. and Inter. 1983); 783 F. 2d 453.

The insertion of the above phraseology as described above positively excludes securing the protective covering to the substrate by way of an adhesive; however, there is no support in the present specification for such exclusion. While the present specification is silent with respect to the use of adhesives, is noted that as stated in MPEP 2173.05(i), the "mere absence of a positive recitation is not the basis for an exclusion."

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 12, 13, and 16-28 rejected under 35 U.S.C. 102(b) as being anticipated by Walter et al. (5,879,775).

With regard to claims 12 and 23-25, Walter et al. disclose protective coatings for identity documents such as security cards, credits cards, personal ID cards, debit cards, etc. (col. 3, line 66 to col. 4, line 24). The card includes a substrate of plastic media

such as a plastic card coated with a protective coating, which has been deposited out of the gas phase (col. 2, lines 26-43). The protective layer has not been secured using an adhesive layer, and can be in the range of a "hundred to several thousand angstroms thick" (col. 2, lines 1-5).

With regard to claim 13, the protective coating may comprise silicon oxide (col.2, line 20 and col. 3, lines 32-39).

With regard to claims 16-19, since the materials are the same as what applicants intend, including metal oxides and diamond-like carbon deposited out of the gas or plasma phase, the claimed properties of the protective layer seen in claims 16-19 would be inherent. Walter et al. also disclose at col. 4, lines 11-24 the numerous benefits of these protective layers, including their resistance to chemical attack and scratching.

With regard to claim 20, Walter et al. disclose at col. 1, lines 26-30 common materials for the plastic card substrate, including polycarbonate.

With regard to claim 21, since the materials of the protective layer are the same as those claimed by applicant, the Examiner has reason to believe that the protective coating would inherently possess the ability to be penetrated by laser light.

With regard to claim 22, Walter et al. disclose at col. 4, lines 8-10 that the card may be provided with optical features, which the Examiner deems to be information, which are then overcoated with the inventive protective layer. Since the materials are the same as what applicants intend, including metal oxides and diamond-like carbon deposited out of the gas or plasma phase, the claimed properties of the protective layer seen in claim 22 would be inherent.

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With regard to claim 26, Walter et al. disclose at col. 4, lines 8-10 that a magnetic strip may be overcoated with the inventive protective layer.

With regard to claim 27, a carbon material includes diamond-like carbon, which is disclosed at col. 3, lines 49-59.

With regard to claim 28, Walter et al. disclose at col. 4, lines 8-10 that the card may be provided with optical features, which the Examiner deems to be individualization, which are then overcoated with the inventive protective layer.

# Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter et al. (6,245,382), as applied to claim 12, in view of Araki et al. (WO97/48774), which is the parent application of the US national stage patent 6,207,236, which will be used herein as an English translation.

Walter et al. set forth all the limitations of applicant's claims 12 as seen in section 7 above; however, Walter et al. fail to disclose a protective layer comprising silanes/silazanes or fluoride materials.

Araki et al. disclose coating films that provide "excellent transparency, abrasion resistance, weather resistance, and water repellency" (Abstract). They disclose as prior

knowledge coating compositions very similar to their invention at col. 4, lines 34-39. Included among these are coating compositions of a silane and a fluorine-containing ethylene; furthermore, they disclose as their invention a coating composition comprising various fluorine-containing monomers such as tetrafluoroethylene (Equation 3, col. 7, line 58) in combination with a metal oxide, which forms the matrix (col. 9, lines 43-65). Specific mention is made of aluminum and silicon oxide, which are ceramics.

Since Araki et al. and Walter et al. are both drawn to coatings providing chemical and abrasion resistance, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the known coating compositions of Araki et al. on the data carrying substrates of Walter et al. The results of this would have been obvious to one of ordinary skill in the art, specifically to provide coatings having enhanced resistance to chemicals or abrasion.

10. Claim 21, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter et al. (6,245,382), as applied to claims 12 and 23, in view of Becker et al. (4,765,656).

With regard to claim 21, Walter et al. disclose all of the limitations of applicants' claim 12 in section 7 above; however, they fail to disclose that the protective coating can be penetrated by laser light to personalize the substrate without producing an optical variation in the protective coating.

Becker et al. disclose at col. 6, lines 14-25 that it is known to burn, by using a laser, user-related data to an inner volume area through a transparent cover film.

Since Walter et al. and Becker et al. are both drawn to identity documents, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of writing user-related data to an inner volume of a protective layer coated identity document of Becker et al. with the protective coated identity document of Walter et al.

With regard to claims 29 and 30, Walter et al. disclose all of the limitations of applicants' claim 23 in section 7 above; however, they fail to disclose a coating, which has an irreversibly variable refractive index, and also it fails includes one section or a plurality of different color sections that have been varied by laser radiation.

Becker et al. disclose at col. 9, line 41 to col. 10, line 51 that it is known to include a layer of a transparent material above the core layer (substrate) that also can be colored by the laser light. This transparent layer can be apart of the cover layer (col. 9, line 64 to col. 10, line 8). In the transparent layer blackened areas can be formed; further, the degree of blackening can be adjusted so that it is possible to form half-tone images (varying in color) (col.10, lines 48-51).

Since Becker et al. and Walter et al. are both drawn to identity documents, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the writing method of Becker et al. in the protective coatings of Walter et al. The results of which would have been predictable to one having ordinary skill in the art. One would have been motivated to do this in order to provide an identity document that was more tamper-resistant.

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# Response to Arguments

11. Applicant's arguments, see Remarks, filed 01/30/2008, with respect to specification objections, claim objections, and the rejection of claims 12, 13, and 18-21 under 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The relevant objections/rejections have been withdrawn. With specific regard to the use of the term "irreversibly variable" the Examiner sees applicant's point of view regarding the language and agrees that, although slightly awkwardly phrased, does not rise to the level of indefiniteness.

12. Applicant's arguments with respect to claims 12-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has amended independent claim 12 to introduce the limitation "wherein the protective coating is not secured to the identity document substrate by adhesive." Although the Examiner deems that this limitation is not supported by the disclosure, please see section 5 regarding the rejection of claims 12-30 under 35 U.S.C. 112 first paragraph; however, for the purposes of examination the Examiner will treat this limitation.

Shvartsman et al. teach a protective coating that is bound to the substrate *via* an adhesive layer, and therefore this reference can no longer meet the limitations of independent claim 12.

The Examiner has made a new rejection; please see section 7 above, using Walter et al. to meet the new limitations of applicant's claim 12, 13, 16-20, and 22-28.

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Likewise, the Examiner has made new rejections using Walter et al. as applied to claim 12 in view of Araki et al. to meet the new limitations of applicant's claims 14 and 15 and Walter et al. as applied to claims 12 and 23 in view of Becker et al. to meet the new limitations of applicant's claims 21, 29, and 30.

### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERARD T. HIGGINS whose telephone number is (571)270-3467. The examiner can normally be reached on M-F 7:30am-5pm est. (1st Friday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerard T Higgins, Ph.D. Examiner Art Unit 1794

/Gerard T Higgins, Ph.D./ Examiner, Art Unit 1794

> /Callie E. Shosho/ Supervisory Patent Examiner, Art Unit 1794